

What Is Claimed Is:

~~Sub B1~~ 1. Apparatus comprising a progressive die for shaping a consecutive series of discs from a strip of relatively stiff material, said die comprising a series of adjacent die stations including a slot cutting station, a plurality of intermediate stations, and a cut off station, said slot cutting station including slot cutting means for forming at least one laterally extending slot between adjacent discs while leaving at least one narrow deformable bridge connecting said adjacent discs, said intermediate stations including cutting means for shaping said discs, and said cut off station including cutting means for severing said bridge.

~~Sub B2~~ 2. Apparatus according to Claim 1, wherein said slot cutting station further comprises pilot cutting means for cutting at least one pilot hole in said discs, and said intermediate stations comprise pilot pin means shaped to extend through said pilot hole for orienting said discs in said intermediate stations.

~~Sub B3~~ 3. Apparatus according to Claim 1, wherein the ends of said slot and said bridge have an angled shape.

~~Sub B4~~ 4. Apparatus according to Claim 3, wherein said angled shape is a chevron.

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5. Apparatus comprising a strip of relatively stiff material including a series of consecutive discs formed along the length thereof, at least two adjacent discs having at least one laterally extending slot therebetween and at least one narrow deformable bridge connecting said adjacent discs.

6. Apparatus according to Claim 5, wherein two laterally spaced narrow deformable bridges are provided.

10 7. Apparatus according to Claim 5, wherein said bridge has angled ends.

8. Apparatus according to Claim 7, wherein said angled ends have a chevron shape.

9. Apparatus according to Claim 5, wherein said discs further have at least one pilot hole formed therein.

20 10. Apparatus according to Claim 5, wherein said strip has a longitudinal center line, and two of said bridges are provided, said bridges being spaced at equal distances on opposite sides of said center line.

11. Apparatus according to Claim ⁷5, wherein said relatively stiff material is motor lamination steel.

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12. A process for punching a series of shaped discs from a strip of relatively stiff material, comprising the steps of cutting at least one slot through said strip between each pair of adjacent sections and forming at least one narrow deformable bridge connecting each pair of adjacent discs, shaping said discs between said bridges, and severing said bridges.

10 13. A process according to Claim 12, and further comprising the steps of cutting at least one pilot hole in each of said discs, and orienting said discs during said shaping by engaging said pilot hole.

14. A process according to Claim 12, and further comprising the step of forming the ends of said bridge with an angular shape.

20 15. A process according to Claim 14, wherein said angular shape is a chevron shape.

16. A process according to Claim 12, wherein said strip has a longitudinal center line, and two of said bridges are formed, said bridges being formed at substantially equal distances on opposite sides of said center line.

17. Apparatus comprising a progressive die including a series of die stations, said stations including cutting means and die pilot means, the distances between said die pilot means of successive stations being substantially constant, and a strip of material shaped by said die, said strip including a series of sections and said sections having strip pilot means adapted to mate with said die pilot means, the distances between said strip pilot means being variable and at times different from said distances between said die pilot means, and
10 deformable bridge means connecting adjacent sections of said strip, said sections being relatively stiff and said deformable bridges being sized to deform and thereby compensate for said variable distances between said strip pilot means.

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